## Calanthe densiflora Lindl. (Orchidaceae), a New Addition to the Flora of Nepal

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Calanthe densiflora Lindl. (Orchidaceae) came out to be a new addition to the flora of Nepal. The characteristics, description and illustration of a flower are given.

Key words: Calanthe, flora, Nepal, Orchid.

Eleven species of Calanthe have early been recorded from Nepal (Banerji 1978, Hara et al. 1978, Banerji and Pradhan 1984, Rajbhandari et al. 1997, Press et al. 2000, White and Sharma 2000, Rajbhandari and Bhattarai 2001). During an orchid survey of the Kathmandu valley, a unique species of Calanthe was collected from south of Bajrabarahi at 1400 m. By checking the available literature (King and Pantling 1898, Pearce and Cribb 2002), this species was identified as Calanthe densiflora Lindl. This species has not been reported previously and is evidently a new addition to the flora of Nepal. Calanthe densiflora is the only species in Nepal with inflorescences distinct from the leaf-bearing stem, arising directly from the rhizome. In all other species of Nepalese Calanthe the inflorescence and leaf-bearing stem arise together pseudobulbs. The botanical description of the plant is given here for further identification of the species.

Calanthe densiflora Lindl., Gen. Sp. Orchid. Pl.: 250 (1833).

Terrestrial herb. Rhizome consisting of jointed fusiform annular lengths about 5 cm long, each producing a pseudo-stem and flowering scape at its thick end. Stem very

short. Leaves 2-4, narrowly elliptic, acute, tapering at the base to the short broad sheathing petiole, 30-90 cm long, 5-12.5 cm wide, petiole 5-15 cm long, or absent. Scape from the rhizome behind the stem, 10–30 cm long, erect, stout, bearing three or four tubular, inflated, ovate, acute sheaths 2.5 cm or more long. Raceme 5-7.5 cm long, at first subglobose, afterwards cylindrical, densely flowered. Floral bracts caducous, thin, elliptic, acute, 2-2.5 cm long, longer than the abruptly stalked ovary, the bracts of the lowest flowers often much longer. Flowers yellow, (to the end of the spur) 2 cm long, and 1 cm in diameter. Spur nearly as long as the ovary and its pedicel, cylindric, slightly inflated towards the apex. Sepals and petals slightly connivent, sub-equal, oblanceolate, acute. Lip adnate to the column from its middle; 3-lobed, the basal lobes large, semierect, with 2 rounded lamellae between them; apical lobe quadrate, emarginated, the sinus broad, shallow. Column straight, thick at the base only, shorter than the spur. Stigma rounded, entire. Anther with a short oblong transparent lip. Pollinia sub-equal, globoseclavate, attached by a single caudicle to a small gland (Fig. 1).

Flowering time: October-December.

Distribution: Nepal, India (Darjeeling,

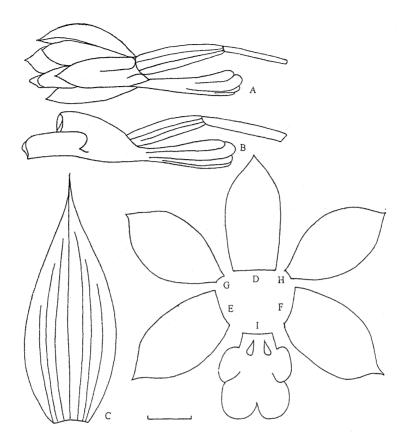


Fig. 1. Calanthe densiflora. A. Flower (lateral view). B. Column, lip, spur, ovary and stalk. C. Bract. D-F. Sepals. G, H. Petals. I. Lip. Scale: 4 mm.

Sikkim), Bhutan, Myanmar, Vietnam, China, Taiwan and Japan (Iriomote Island).

Ecology: Grows as a terrestrial plant in disturbed subtropical forest.

Specimen examined: South of Bajrabarahi, Kathmandu valley, 1400 m, 20 November 1999 in disturbed forest floor, K. R. Rajbhandari 99/51 (KATH).

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## References

Banerji M. L. 1978. Orchids of Nepal. International Bioscience Series–4. Today & Tomorrow's Printers and Publishers, New Delhi. — and Pradhan P. 1984. The orchids of Nepal Himalayd. J. Cramer, Germany.

Hara H., Stearn W. T. and Williams, L. H. J. (eds.)1978. An Enumeration of the Flowering Plants of Nepal Vol. l. British Museum (Natural History), London.

King G. and Pantling R. 1898. Orchids of Sikkim Himalaya. Ann. Roy. Bot. Gard. Calcutta 8: 1– 342.

Pearce N. R. and Cribb P. J. 2002. Flora of Bhutan Volume 3 Part 3: The Orchids of Bhutan. Royal Botanic Garden Edinburgh, Royal Government of Bhutan, Edinburgh.

Press J. R., Shrestha K. K. and Sutton D. A. 2000. Annotated Checklist of the Flowering Plants of Nepal Natural History Museum, London.

Rajbhandari K. R. and Bhattarai S. 2001. Beautiful Orchids of Nepal. Kathmandu.

, and Joshi R. 1997. Calanthe anjanii S. Z.

Lucksom (Orchidaceae), a new record for Nepal. Nat. Hist. Soc. Nepal Bull. 7: 18.

White K. and Sharma B. 2000. Wild Orchids in Nepal:

The Guide to the Himalayan Orchids of the Tribhuvan Rajpath and Chitwan Jungle. White Lotus Co., Ltd., Bangkok.

## K. R. ラジバンダリ:ネパール新産の *Calanthe densiflora* Lindl. (ラン科)

ネパールには11種のエビネ属植物が産することが知られている。カトマンズ盆地のラン科植物を調べたところ、これまでネパールからは報告のなかったエビネ属植物が採集された。これはCalanthe densiflora Lindl. (タマザキエビネ)であ

り, 花序は, 茎葉を生じる茎とは別に, 根茎より生じるという特徴をもち, 他のネパール産のエビネ属植物とは異なる.

(ネパール・植物資源局)